



## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2021-0344; Project Identifier MCAI-2021-00381-R; Amendment 39-21534; AD 2021-10-01]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Leonardo S.p.a. Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Leonardo S.p.a. Model AW169 helicopters. This AD was prompted by false simultaneous in-flight disengagement of automatic flight control system (AFCS) channels 1 and 2. This AD requires temporarily revising the existing Rotorcraft Flight Manual (RFM) for your helicopter. This AD also requires installing an AFCS software upgrade and concurrently removing that RFM revision. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0344.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0344; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant

Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email

hal.jensen@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0156, dated August 24, 2017 (EASA AD 2017-0156), to correct an unsafe condition for Leonardo S.p.A. (formerly Finmeccanica Helicopter Division, AgustaWestland) Model AW169 helicopters, all serial numbers, except those equipped with AFCS software part number (P/N) 6F2210AS0103 or later. EASA advises of false simultaneous in-flight disengagement of AFCS channels 1 and 2 that resulted from the activation of specific AFCS modes combined with the unavailability of hybrid ground speed data at take-off. Accordingly, EASA AD 2017-0156 requires temporarily amending the Limitations Section of the RFM, informing all flight crews, and thereafter, operating the helicopter accordingly. EASA AD 2017-0156 also requires installing AFCS software P/N 6F2210AS0103 and removing the temporary RFM revision. This condition, if not addressed, could result in temporary loss of control of the helicopter, possibly resulting in damage to the helicopter or injury to occupants.

EASA initially issued EASA AD 2017-0112 dated June 26, 2017 (EASA AD 2017-0112), to address this unsafe condition. EASA issued AD 2017-0156 to supersede EASA AD 2017-0112 to require installing the newly-developed AFCS software upgrade and removal of the temporary RFM revision.

### **FAA's Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all known relevant information and determining that the

unsafe condition described previously is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information Under 1 CFR Part 51**

The FAA reviewed Leonardo Helicopters Alert Service Bulletin No. 169-064, dated August 9, 2017. This service information specifies procedures for installing the new release of flight control computer software P/N 6F2210AS0103.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **AD Requirements**

This AD requires temporarily revising the Limitations Section of the existing RFM for your helicopter to add AFCS mode limitations. This AD also requires installing an AFCS software upgrade and concurrently removing that RFM revision.

### **Differences between this AD and the EASA AD**

EASA AD 2017-0156 applies to Model AW169 helicopters, except those with AFCS software P/N 6F2210AS0103 or later installed; whereas this AD applies to Model AW169 helicopters with AFCS software P/N 6F2210AS0102 or previous versions installed instead. EASA AD 2017-0156 requires installing AFCS software P/N 6F2210AS0103 and removing the temporary RFM revision within 100 flight hours or 3 months, whichever occurs first after its effective date, whereas this AD requires those actions within 100 hours time-in-service after the effective date of this AD instead.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon

finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause. There are currently no helicopters with this type certificate affected by this AD on the U.S. Registry.

Accordingly, notice and opportunity for prior public comment are unnecessary, pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, for the foregoing reason(s), the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

### **Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-0344; Project Identifier MCAI-2021-00381-R” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that

you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email [hal.jensen@faa.gov](mailto:hal.jensen@faa.gov). Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

### **Costs of Compliance**

There are no costs of compliance with this AD because there are currently no helicopters with this type certificate affected by this AD on the U.S. Registry.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-10-01 Leonardo S.p.a.:** Amendment 39-21534; Docket No. FAA-2021-0344;  
Project Identifier MCAI-2021-00381-R.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.



**(c) Applicability**

This AD applies to Leonardo S.p.a. Model AW169 helicopters, certificated in any category, with automatic flight control system (AFCS) software part number (P/N) 6F2210AS0102 or previous versions installed.

**(d) Subject**

Joint Aircraft Service Component (JASC) Code: 2200, Auto Flight System.

**(e) Unsafe Condition**

This AD was prompted by false simultaneous in-flight disengagement of AFCS channels 1 and 2. The FAA is issuing this AD to address concurrent disengagement of those AFCS channels resulting from the activation of specific AFCS modes combined with the unavailability of hybrid ground speed data at take-off. The unsafe condition, if not addressed, could result in temporary loss of control of the helicopter and subsequent damage to the helicopter or injury to occupants.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) Within 15 hours time-in-service (TIS) after the effective date of this AD, revise the Limitations Section of the existing Rotorcraft Flight Manual (RFM) for your helicopter by adding the information in Figure 1 to paragraph (g)(1) of this AD. Inserting a different document with information identical to the information in Figure 1 to paragraph (g)(1) of this AD is acceptable for compliance with the requirements of this paragraph. This action may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with § 43.9(a)(1) through (4) and § 91.417(a)(2)(v). The record must be maintained as required by § 91.417, § 121.380, or § 135.439.

## **AFCS MODE LIMITATIONS**

If “F” symbol is displayed next to groundspeed readout (GS) at the bottom of the IAS tape on PFD, APP/NAV AFCS modes must not be used when the navigation source is VOR/ILS/LOC. Therefore VOR navigation and VOR/ILS/LOC approaches must not be coupled to AFCS but are allowed if manually flown by the pilot.

### **NOTE**

The “F” symbol displayed next to groundspeed readout (GS) is due to:

- ADAHRS/GPS degradation
- or
- “DG” mode selection

In both cases the groundspeed (GS) data source is FMS instead of GPS.

Figure 1 to Paragraph (g)(1)

(2) Within 100 hours TIS after the effective date of this AD:

(i) Install AFCS software P/N 6F2210AS0103 by following Section 3., the Accomplishment Instructions, paragraph 3., of Leonardo Helicopters Alert Service Bulletin No. 169-064, dated August 9, 2017, and concurrently

(ii) Remove the RFM revision required by paragraph (g)(1) of this AD.

### **(h) Special Flight Permits**

If AFCS software P/N 6F2210AS0102 or a previous version is installed, VOR navigation and VOR/ILS/LOC approaches coupled to AFCS are prohibited; VOR navigation and VOR/ILS/LOC approaches are allowed if manually flown by the pilot.

### **(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

(1) For more information about this AD, contact Hal Jensen, Aerospace Engineer, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 950 L'Enfant Plaza N SW, Washington, DC 20024; telephone (202) 267-9167; email [hal.jensen@faa.gov](mailto:hal.jensen@faa.gov).

(2) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2017-0156, dated August 24, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2021-0344.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Leonardo Helicopters Alert Service Bulletin No. 169-064, dated August 9, 2017.

(ii) [Reserved]

(3) For service information identified in this AD, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>.

(4) You may view this service information at the FAA, Office of the Regional

Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on April 26, 2021.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

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